

## **Occurrence Details**

Occurrence Number: 1150 187 Occurrence Name: Upper Glacier Shaft

Occurrence Type: Hard-rock

Status: Showing

Date printed: 4/29/2025 7:05:47 AM

## **General Information**

Secondary Commodities: gold

Aliases: Glacier Gulch

Deposit Type(s): Vein Au-Quartz

Location(s): 63°53'42.86" N - -139°16'49.91" W

NTS Mapsheet(s): 115014

Location Comments: Coordinates provided by Klondike Gold Corp. in 2019.

Hand Samples Available: No

Last Reviewed:

#### Capsule

#### Work History

This occurrence corresponds to a historical shaft that is likely c.1900. Located near the Glacier Gulch occurrence (MINFILE occurrence 1150 183), the shaft was discovered in 2018 during drill site reclamation at Glacier Gulch. The area around the shaft was originally staked as the SUL cl 1-32 in 1972 by Sullivan & Rodgers who carried out soil sampling across the claims in 1972.

The occurrence is currently located within the RJ 1-70 cl (YA64216, etc.) staked by Dawson Eldorado Exploration in June of 1981. In 1984, Dawson Eldorado carried out soil sampling across the claims containing the Upper Glacier shaft. In June 1986, the property was optioned to Arbor Resources Inc., which explored with airborne magnetics, EM and VLF-EM geophysical surveys, buildozer trenching, rotary drilling and soil sampling in 1987. Soil sampling was performed across the claims in 1991. The RJ claims were optioned to Kennecott Canada Inc. in May of 1993, and transferred back to Arbor Resources in January of 1995.

In January, 1996 Arbor Resources Inc. changed its name to Klondike Gold Corp. Klondike Gold Corp. optioned a 50% interest to Klondike Star Mineral Corp. (KSMC), which became a 50/50 joint venture. In 2005, Klondike Star Mineral Corp held a 55% interest in the RJ and surrounding and became the main operator all claims, including the Lone Star zone (MINFILE occurrence 1150 072).

Klondike Gold Corp. resumed work in 2011 and purchased Klondike Star Mineral Corp. in 2015 to restore a 100% interest. No work was done at the Glacier Gulch occurrence until 2012 when Klondike Gold Corp. performed prospecting in the area as part of a regional program. AECOM was also contracted in 2012 to provide a detailed surficial terrain map for the entire Klondike property, including the RJ claims.

In 2015, Klondike Gold Corp. performed prospecting, a ground magnetics geophysical survey and orthophoto imagery over the RJ claims as part of a regional program. In 2018, Klondike Gold drilled two NQ holes totaling 201.16 m at the nearby Glacier Gulch prospect (MINFILE occurrence 115O 183) and performed regional airborne magnetics, structural mapping and prospecting over their properties, including the RJ claims.

#### Regional & Property Geology

Both the Upper Glacier shaft and the Glacier Gulch prospect are located within the Klondike region, which is underlain by the Permian Klondike Schist Assemblage of the Yukon-Tanana terrane (YTT). The Klondike Schist represents a transition from plutonism to arc volcanism that has undergone greenschist facies metamorphism and consists of metaplutonic Sulphur Creek orthognesis in the west that transitions eastward to a package of metavolcanic and metasedimentary units including: felsic to mafic (quartz-mica ± chlorite) schist, graphitic schist, and quartz augen schist (PKf and PKs). Evidence of five deformation events (D1 to D5) are present in within the Klondike Schist Assemblage as a result of obduction and regional thrusting and faulting related to uplift, which have produced a visible S2 and S3 foliation fabric in the schist units.

The lithological units of the Klondike region commonly contain both large, foliaform quartz veins associated with D3 folding and thrusting and discordant quartz veins possibly associated with D4 brittle faulting. Mineralization is generally hosted in the discordant quartz veins, however, the exact mineralization age and timing in the Klondike region is currently unknown. A structural mapping program completed by SRK Consulting Inc. in 2018 on the Klondike claims in the Lone Star property area identified a newly defined "D4" fault system interpreted to be the primary conduit for gold mineralization fluids that suggests a younger mineralization age than previously assumed. The white to locally oxidized, discordant veins are generally mineralized with sulphides (pyrite, rare galena, chalcopyrite), as well as visible gold, and are rarely more than 2-3 metres thick. Where present, visible gold is commonly noted along the selvages of both fresh and oxidized pyrite grains and can also occur as free grains within the quartz veins.

#### **Mineralization & Results**

Mineralization at the nearby Glacier Gulch prospect (MINFILE occurrence 1150 183) was noted in drill core as visible gold-bearing discordant quartz veining hosted by brittle mafic and/or felsic schist (quartz-mica ± chlorite). The Upper Glacier shaft is interpreted to be in proximity to the large "D3" Nugget Fault.

Trenching and rotary drilling on the RJ claims encompassing the Upper Glacier shaft by Arbor Resources in 1987 returned anomalous gold values, including: 0.029 oz/t over 3 m in trench 87Tr13 and 0.172 oz/t over 5 feet in rotary hole 87-R-26. The 1991 soil sampling program by Arbor Resources returned anomalous values over the RJ claims of up to 4930 ppb Au.

#### **Work History**

Date	Work Type	Comment	
7/1/2019	Geochemistry		
7/1/2019	Remote Sensing		
6/1/2018	Geochemistry		
6/1/2018	Airborne Geophysics		

12/13/2018	Airborne Geophysics	
12/13/2018	Geology	
12/13/2018	Other	
12/13/2015	Airphotography	
12/13/2015	Ground Geophysics	
12/13/2012	Geology	
12/13/2012	Other	
12/13/1991	Geochemistry	
12/13/1987	Drilling	One rotary drill hole.
12/13/1987	Geochemistry	
12/13/1987	Ground Geophysics	As well as EM and VLF-EM.
12/13/1987	Trenching	2 trenches in the vicinity of the shaft.
12/13/1984	Geochemistry	
12/13/1972	Geochemistry	
12/13/1900	Development, Underground	Likely sunk c. 1900.

# **Assessment Reports that overlap occurrence**

Report Number	Year	Title	Worktypes		Meters Drilled
<u>097066</u>	2015	Report on Diamond Drilling, Prospecting, and Ground Magnetics on the Lone Star Property, Dawson Mining District, Yukon Territory, Canada	Diamond - Drilling, Rock - Geochemistry, Magnetics - Ground Geophysics	19	1369.30
096398	2012	Diamond Drilling, Trenching, Soil Sampling, Rock Sampling, and Prospecting at the Lone Star Property	All Weather Road - Development, Surface, All Weather Road - Development, Surface, Diamond - Drilling, Diamond - Drilling, Drill Core - Geochemistry, Porill Core - Geochemistry, Rock - Geochemistry, Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, Prospecting - Other, Prospecting - Other, Backhoe - Trenching, Backhoe - Trenching	8	2762.20
094919	2007	Diamond Drilling, Rotary Drilling, Geological Mapping, Rock and Soil Geochemistry, IP Geophysics, Trenching and Bulk Sampling on the Lone Star Property	Diamond - Drilling, Percussion - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, IP - Ground Geophysics, Bulk Sample - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Resource Estimate - Studies, Hand - Trenching	11	1314.10
094638	2006	Diamond Drilling, Geological Mapping, Rock and Soil Geochemistry, IP Geophysics, Trenching and Bulk Sampling on the Lone Star	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, IP - Ground Geophysics, Bulk Sample - Lab Work/Physical Studies, Resource Estimate - Studies, Mechanical - Trenching	23	2892
094579	2005	Diamond Drilling, Geological Mapping, Rock and Soil Geochemistry, Trenching and Bulk Sampling on the Lone Star Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Prospecting - Other, Backhoe - Trenching, Mechanical - Trenching	32	5429.40
094689	2004	Geological Mapping, Rock and Soil Geochemistry, Trenching and Bulk sampling on the Lone Star Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Data Compilation - Pre-existing Data, Mechanical - Trenching		
093321	1994	1994 Annual Report on the Klondike Gold Project	Magnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Prospecting - Other, Backhoe - Trenching		
093320	1994	1994 Annual Report on the Lone Star Project	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology	2	397.60
<u>093075</u>	1992	Geological, Geochemical and Trenching Report on the Dawson Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other, Mechanical - Trenching		
092162	1991	Geological, Geochemical, and Trenching Report on the Lone Star Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
092969	1990	Geological and Geochemical Report on the Lone Star Property	Reverse Circulation - Drilling, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Line Cutting - Other, Data Compilation - Pre-existing Data, Mechanical - Trenching	45	2796
092860	1989	Geological, Geochemical and Trenching Report on the Dawson Property	Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Mechanical - Trenching		

Performed by Mark Management Ltd. on the REEF Grid Geophysics, Line Cutting - Other, Mechanical - Trenching 1987 Report on Combined Helicopter Borne Electromagnetic, Magnetic, and VLF-EM Survey Bonaza-Eldorado Creek Area  Geological, Geochemical, Geophysical, Diamond and Rotary Drilling Report on the Lone Star Property  Geology, EM - Ground Geophysics, Diamond - Drilling, Rotary - Drilling, Politic Cuttings - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Politic Cuttings - Geochemistry, Rock - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Politic Cuttings - Geochemistry, Rock - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Magnetics - Ground Geophysics						
and VLF-EM Survey Bonaza-Eklorado Creek Area  Geophysics, VTEM - Airborne Geophysics  Magnetic - Airborne Geophysics, Diamond - Drilling, Rotary - Drilling, Porill Cuttings - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Mechanical - Trenching  Geological, Geochemical and Geophysical Report for Work performed by Mark Management on the Dawson Property  Geology, EM - Ground Geophysics, Magnetics - Ground Geophysics, Magnetics - Ground Geophysics, Magnetics - Ground Geophysics, Heavy Mineral Concentrate - Lab Work/Physical Studies, Petrographic - Pre-existing Data  1981  Summary Report 1983 Mapping and Interpretation Lone Star Gold Property  Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Process/Interpret - Pre-existing Data  Orthophoto - Airphotography, Cursory Property Visit - Other, Data Compilation - Pre-existing Data, Hand - Trenching, Mechanical - Trenching	092690	1988		- Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground		
Geological, Geochemical, Geophysical, Diamond and Rotary Drilling Report on the Lone Star Property  Geology, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics	<u>091760</u>	1987				
Geological, Geochemical and Geophysical Report for Work performed by Mark Management on the Dawson Property  - Geology, EM - Ground Geophysics, Magnetics - Ground Geophysics, Magnetics - Ground Geophysics, Heavy Mineral Concentrate - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Mechanical - Trenching  Report of 1984 Exploration on the Lone Star Property of Dawson Eldorado Mines Ltd.  Report of 1984 Exploration on the Lone Star Property of Dawson Eldorado Mines Ltd.  Summary Report 1983 Mapping and Interpretation Lone Star Gold Property  Geology, Process/Interpret - Pre-existing Data  Op1399  1981  Gold Potential Evaluation Report Klondike District on Violet Gold - Quartz Property  Geology, Process/Interpret - Pre-existing Data  Orthophoto - Airphotography, Cursory Property Visit - Other, Data Compilation - Pre-existing Data  Orthophoto - Airphotography, All Weather Road - Development, Surface, Rock - Geochemistry, Detailed Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Line Cutting - Other, Prospecting - Other, Surveying - Other, Data Compilation - Pre-existing Data, Hand - Trenching, Mechanical - Trenching	092132	1987		Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics,	50	5753.40
Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Line Cutting - Other, Surveying - Other	091807	1985		- Geology, EM - Ground Geophysics, Magnetics - Ground Geophysics, Heavy Mineral Concentrate - Lab Work/Physical Studies,		
Property  Geology, Process/Interpret - Pre-existing Data  Orthophoto - Airphotography, Cursory Property Visit - Other, Data Compilation - Pre-existing Data  Orthophoto - Airphotography, All Weather Road - Development, Surface, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Line Cutting - Other, Prospecting - Other, Surveying - Other, Data Compilation - Pre-existing Data, Hand - Trenching, Mechanical - Trenching	091683	1984		Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional		
1981 Quartz Property Compilation - Pre-existing Data  Orthophoto - Airphotography, All Weather Road - Development, Surface, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Line Cutting - Other, Prospecting - Other, Surveying - Other, Data Compilation - Pre-existing Data, Hand - Trenching, Mechanical - Trenching	<u>091535</u>	1983		1. 5 577 5 1. 5		
Summary Report of 1981 Exploration on the Lone Star Ridge Property  Summary Report of 1981 Exploration on the Lone Star Ridge Property  Summary Report of 1981 Exploration on the Lone Star Ridge Property  Summary Report of 1981 Exploration on the Lone Star Ridge Studies, Line Cutting - Other, Prospecting - Other, Surveying - Other, Data Compilation - Pre-existing Data, Hand - Trenching, Mechanical - Trenching	<u>091399</u>	1981	·			
060149 1972 Geological and Geochemical Report Yukon Quartz Mineral Claims Silt - Geochemistry, Soil - Geochemistry	091064	1981	,	Surface, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Line Cutting - Other, Prospecting - Other, Surveying - Other, Data Compilation - Pre-existing Data, Hand - Trenching,		
	060149	1972	Geological and Geochemical Report Yukon Quartz Mineral Claims	Silt - Geochemistry, Soil - Geochemistry		

Related References					
Number	Title	Page(s)	Reference Type	Document Type	
1992Geol Vol3_15	Preliminary observations on the geology and geochemistry of quartz veins in the Klondike District, west-central Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper	
1996-1(G )	Geological Compilation Maps of the Northern Stewart River Area, Klondike and Sixtymile Districts (115N/15, 16, 115O/13, 14 and Parts of 115O/15, 16)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)	
1991Rus hton	A fluid inclusion and stable isotope study of mesothermal gold-quartz veins in the Klondike Schists, Yukon Territory		University of Alberta	MSc Thesis	